

Agenda of workshop on “Assessing the suitability of host rock”
-Developing practical approaches to assess geological characteristics
influencing repository design and performance assessment-

100825 JAEA (rev. 101006)

1. Aim

JAEA has initiated activities within its second medium-term plan (five years) this April. For the last five years of our first medium-term plan, we have been focusing on performance assessment methodology development and its applications, based on site-specific data obtained from the surface investigations at the Mizunami and Horonobe URL sites. Both URL programmes have now advanced from surface-based investigations to the construction and operation phases.

One of the important goals in our second medium-term plan is to provide a comprehensive methodology for repository assessment based on descriptions of specific sites. To meet this goal, we are now reviewing and evaluating the progress during the first medium-term, with the aim of producing a detailed action plan that optimises the linkage between site investigations, design/engineering and assessment; this is coupled to further development of our URL programmes.

In this context, we will host an international workshop with selected partner organisations to discuss development of practical approaches to identify and assess the key geological characteristics of [suitable host rock](#) influencing repository design, operational procedures and assurance of operational / post-closure safety.

2. Logistics

Date: October 7th - 8th, 2010

Place: Yokohama Minato-Mirai, Landmark Tower, 25F

3. Participants: (40~50)

1) Foreign organisations (~10)

Bilateral collaborators with JAEA

- Nagra: Stratis Vomvoris, Irina Gaus
- LBNL: Chin-Fu Tsang, Kenzi Karasaki
- UCB: Joonhong Ahn

Consultants

- Ian McKinley
- Johan Andersson

2) JAEA (~20)

3) Other Japanese organisations (~20)

NUMO, JNFL, CRIEPI, RWMC, JNES, AIST, Private companies....

Professors.....

Consultant

- Hiroyasu Takase

4. Agenda

October, 7th (Thursday)

Topical status overview: Developing practical approaches to assess geological structures influencing repository design, operational procedures or assurance of operational / post-closure safety

Chair; Johan Andersson

10:15-10:30	Welcome address (15)	<i>H. Ishikawa (IAEA)</i>
10:30-10:50	Introduction of the goals, format and expected output from this workshop (10+10)	<i>K. Miyahara (IAEA)</i>
10:50-12:00	Presentation of the leading experiences of URLs and Repository projects	
	1) Sedimentary rock (20+15)	<i>S. Vomvoris (Nagra)</i>
	2) Fractured hard rock (20+15)	<i>J. Andersson</i>
12:00-13:00	lunch	
13:00-13:30	Requirements and preferable features for the selection of host rocks (20+10)	<i>S. Suzuki, S. Kubota, K. Ishiguro, H. Tsuchi (NUMO)</i>
13:30-14:10	Strategy of conceptual model development based on site characterization (25+15)	<i>H. Umeki (IAEA)</i>
14:10-15:10	Site description at the surface-based investigation and the shaft excavation phases	
	1) Mizunami Underground Research Laboratory, an example of fracture rock (20+10)	<i>S. Takeuchi (IAEA)</i>
	2) Horonobe Underground Research Laboratory, an example of sedimentary rock (20+10)	<i>T. Iwatsuki (IAEA)</i>
15:10-15:30	Coffee break	
15:30-17:00	Case studies based on IAEA's URLs site description	
	An approach for the host rock assessment methodology development in IAEA, based on URLs site investigation data (20+10)	<i>A. Sawada (IAEA)</i>
	Case studies	
	1) Mizunami Underground Research Laboratory, an example of fracture rock (20+10)	<i>T. Kunimaru (IAEA)</i>
	2) Horonobe Underground Research Laboratory, an example of sedimentary rock (20+10)	<i>K. Maekawa (IAEA)</i>
17:00-17:30	Discussion	

October, 8th (Friday)

Chair; Ian McKinley

10:00-10:45	Rapporteurs' summary and synthesis (30 + 15)	<i>I. McKinley & H. Takase</i>
	Structured brainstorming (in groups, using an argumentation modelling approach)	<i>All</i>
	➤ Develop host rock requirements on engineering and long-term safety	
	➤ Classify the host rock structures for stepwise identification of suitable rock volumes due to practical measurement techniques	
	➤ Illustrate practical feedback from requirement evaluation to site characterisation, design and modelling strategy	
10:45-11:00	Introduction and allocation of participants to groups	
11:00-14:00	Group work (coffee & sandwiches available)	
14:00-15:30	Presentation of group output	
15:30-16:00	Summary & wrap-up	